

California Department of Transportation (Department)

Prequalified Products List

Corrosion Protection Systems for Mechanical Butt Splices, Butt Welds and Lap Welds on Epoxy Coated Reinforcement

01/04

This document lists corrosion protection systems that have been tested and are approved by the Materials Engineering and Testing Services, Corrosion Technology Branch for use as corrosion protection coverings for mechanical butt splices, butt welds and lap welds on epoxy coated reinforcement. These systems are approved for use when applied in accordance with the manufacturer's recommendations, supplemental requirements of this document, and other applicable requirements of the Department's specifications. When there is a conflict between the manufacturer's recommendations and the requirements of the Department, the Department requirements shall govern.

Other systems will be considered for inclusion on this list subject to evaluation by the Corrosion Technology Branch.

For additional information, please send email to: rob_reis@dot.ca.gov

Prequalified Systems

PRODUCT/COMPANY	Web Site Link
<p><u>SpliceSeal, Patent No. 6,265,065</u> RJD Industries, Inc. 26945 Cabot Rd., Suite # 105 Laguna Hills, CA 92653-7009 Phone: (800) 344-4753 Fax: (949) 582-0995</p>	<p>http://www.rjdindustries.com/</p>

Supplemental Requirements

- 1) Corrosion protection systems on this list are for corrosion protection of mechanical and weld splices of epoxy-coated reinforcement, and **shall not** be allowed for use as a general repair strategy for damaged epoxy coating.
- 2) Corrosion protection systems for splices on epoxy-coated reinforcement consisting of a heat shrinkable tube must be installed as a continuous tube. Cutting a tube lengthwise and wrapping it around the splice region is not permitted.

- 3) All sharp edges and burrs that may damage the corrosion protection system shall be removed from the coupler and/or rebar prior to applying the shrink tubing. Grinding of welds and/or couplers shall be done in accordance with the Department's acceptable practices and/or manufacturer's procedures (for mechanical splices).
- 4) Corrosion protection systems that include the use of heat-shrinkable products require a pre-heat of the coupler that will be in contact with the shrink product. The target range for the preheat temperature is between 100 °C (212 °F) and 115°C (240°F). Heat may be applied directly to the installed coupler, however, it shall not be applied directly to the epoxy-coated reinforcement, since the heat source may damage the coating. Indirect heat (heat transferred from the coupler to the epoxy-coated reinforcement) is acceptable and will enhance the bond of the shrink product. However, in no case shall the indirect heat raise the temperature of the coated bar above 115°C (240°F) or burn the epoxy coating. All oil, dirt, grease, solvents, or other deleterious material shall be removed from the mechanical splice immediately prior to pre-heating. The contractor shall monitor the preheat temperature with a heat sensor gun. The corrosion protection system shall be applied before the pre-heated coupler has cooled below the minimum pre-heat temperature.
- 5) Corrosion protection systems shall extend a minimum of 50 mm (2 in) onto the epoxy coated region of the bar after final installation.
- 6) Heat shrinkable tubing with cuts, tears, pinholes, or other defects, as determined by the Engineer, shall be rejected.